UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,869	12/31/2003	Robert Edward Gamble	24AT-135859	6292
7590 09/18/2006			EXAMINER	
Patrick W. Ras Armstrong Teas		,	PALABRICA, RICARDO J	
Suite 2600	date DDI		ART UNIT	PAPER NUMBER
One Metropolitan Square			3663	
St. Louis, MO 63102			DATE MAILED: 09/18/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Summer	10/749,869	GAMBLE ET AL.				
Office Action Summary	Examiner	Art Unit				
	Rick Palabrica	3663				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period was precised to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timused apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	I. sely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 05 Ju	Responsive to communication(s) filed on <u>05 June 2006</u> .					
	action is non-final.					
3) Since this application is in condition for allowar	3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 5-19 and 25-28 is/are pending in the a	4)⊠ Claim(s) <u>5-19 and 25-28</u> is/are pending in the application.					
4a) Of the above claim(s) <u>13-16,27 and 28</u> is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.	<u> </u>					
6)⊠ Claim(s) <u>5-12, 17, 19, 25 and 26</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers						
9) The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Ex						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
See the attached detailed Office action for a list (or the certified copies not receive	0 .				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal P					
Paper No(s)/Mail Date	6) Other:	••				

Application/Control Number: 10/749,869 Page 2

Art Unit: 3663

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on 7/7/06, including the 6/5/06 Amendment that directly amended claim9, has been entered.

Claims 5-19 and 25-28 are pending in this application. Claims 1-4 and 20-24 have been canceled. Claims 13-16 and 27-28 are withdrawn from consideration.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 5-7, 9, 10, 12, 17, 18, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by either one of Gou et al. (U.S. 5,307,390) or Szabo et al. (U.S. 5,263,066).

Gou et al. disclose a core catcher for a nuclear reactor (see Figs. 1-4).

Art Unit: 3663

As to claims 5-7, 9 and 17, applicant's claim language reads on Gou et al.'s invention as follows: a) containment vessel reads on containment vessel 12; b) "suppression pool" reads on steam suppression pool 50; c) "drywell" reads on drywell 20; d) "drywell sidewall extending from said floor" reads on the wall 12a; e) "base grid" reads on base grid 34; f) "base grid shield wall" reads on shield wall 60; g) "flow baffle" reads on the combination of interconnected top blocks 40a and middle blocks 40b having joints 52 to allow fluid flow; h) "top plate" reads on bottom blocks 40c; i) bottom plate" reads the top side of I-beams 38; j) "annular channel" reads on channel 62; k) "inlet flow channel" and "outlet flow channel" reads on any one of the plurality of apertures in ring girder 66 that provide access between the sump and the drywell (e.g. see Fig. 4 and col. 4, lines 6+); k) "inlet flow passage" reads on the horizontal space between base grid 34 and the containment floor where water 50 from conduit 46 enters the underside of grid 34 (see Fig. 4 and col. 3, lines 27+); I) "outlet flow passage" reads on the combination of conduit 58 and sump pump 56 which removes water from the sump (see col. 3, lines 53+).

As to claims 10 and 18, the claims are directed to an <u>apparatus</u> and to a <u>process</u>. The limitation, "substantially sinuous flow path" is a process limitation that does not serve to patently distinguish the claimed apparatus over Gou et al. Nonetheless, the flow path in Gou et al. is inherently sinuous.

As to claims 12 and 26, Gou et al.'s flow baffle includes a flow inlet side (bottom side of baffle) and a flow outlet side (top side of baffle). The limitations "inlet" and "outlet" are process limitations, but Gou et al. meet these limitations anyway.

Art Unit: 3663

Szabo et al. disclose a core catcher for a nuclear reactor (see Figs. 1-4).

As to claims 5-7, 9 and 17, applicant's claim language reads on Szabo et al.'s invention as follows: a) containment vessel reads on confinement enclosure 10; b) "suppression pool" reads on tanks 56 (see Fig. 1 and col. 8, lines 19+); c) "drywell" reads on the inside of vessel well 14; d) "drywell sidewall extending from said floor" reads on the sidewall of vessel well 14; e) "base grid" reads on horizontal central part of receptacle 20 (e.g., see Fig. 2 and col. 6, lines 32+); f) "base grid shield wall" reads on vertical part of receptacle 20 (see Fig. 2 and element 24); g) "flow baffle " reads on gratings or grids 44 (see Fig. 1 and col. 7, lines 49+); h) "top plate" reads on top plate of horizontal central part of receptacle 20; i) "bottom plate" reads on bottom plate of horizontal central part of receptacle 20; j) "annular channel" reads on annular channel between the vertical part of receptacle 20 and the drywell wall; k) "inlet flow channel" reads on conduit 50 (see Fig. 1 and col. 8, lines 26+); I) "outlet flow channel" reads on conduit 46 (e.g. see Fig. 1 and col. 8, lines 25+); k) "outlet flow passage" reads on the horizontal pipes 64 (see Fig. 1 and col. 8, lines 43+); I) "inlet flow passage" reads on the horizontal portion of supply pipe 60 adjacent the containment floor (see Fig. 1 and col. 8, lines 46+, or Figs. 5 and 6).

As to claims 10 and 18, the claims are directed to an <u>apparatus</u> and to a <u>process</u>. The limitation, "substantially sinuous flow path" is a process limitation that does not serve to patently distinguish the claimed apparatus over Szabo et al. Nonetheless, the flow path in Szabo et al. is inherently sinuous.

As to claims 12 and 26, Szabo et al.'s flow baffle includes a flow inlet side (bottom side of baffle) and a flow outlet side (top side of baffle). The limitations "inlet" and "outlet" are process limitations, but Szabo et al. meet these limitations anyway.

- 3. Claims 11 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Gou et al. Note from Fig. 2 that one end of baffles 40a, 40b has larger cross sectional area than the other end. As applied to Fig. 2, applicant's claim language "base end," reads on the end of a flow baffle away from the central area 42a and "tip end," reads on the end near the central area 42a.
- 4. Claims 8 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Szabo et al.

As to claim 8, see Fig. 1 and note that the element 64 extends from the sump to the suppression pool (tank 56).

As to claim 25, Szabo et al. disclose that containers 26 attached to the bottom plate of the grid plate can be an inverted cone (see Fig. 1 and col. 6, lines 51+).

The claims are replete with statements that are either essentially method limitations or statements of intended or desired use. For example, "providing a flow communication between said drywell and said sump" (e.g., see claim 9), "sinuous flow path is defined in said sump" (e.g., see claim 10), "flow inlet" and "flow outlet" (e.g., see claim 26), etc. These clauses, as well as other statements of intended use do not serve

to patently distinguish the <u>claimed</u> structure over that of the reference, as long as the structure of the cited references is capable of performing the intended use. See MPEP 2111-2115.

See also MPEP 2114 that states:

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1647.

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531.

[A]pparatus claims cover what a device is, not what a device does." <u>Hewlett-Packard Co. v. Bausch & Lomb Inc.</u>, 15 USPQ2d 1525,1528.

As set forth in MPEP 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

Any one of the systems in the cited references is capable of being used in the same manner and for the intended or desired use as the claimed invention. Note that it is sufficient to show that said capability exists, which is the case for the cited references.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References B-E further illustrate prior art.

Application/Control Number: 10/749,869

Art Unit: 3663

6. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Rick Palabrica whose telephone number is 571-272-

6880. The examiner can normally be reached on 6:00-4:30, Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RJP

September 15, 2006

RICARDO J. PALABRICA

Page 7

PHIMARY EXAMINED